



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

MAY 27 2014

REPLY TO THE ATTENTION OF:

E-19J

Marisol R. Simon  
Regional Administrator  
Federal Transit Administration  
200 West Adams Street, Suite 320  
Chicago, Illinois 60606

Brent Rusco  
Senior Professional Engineer  
Hennepin County  
Housing, Community Works & Transit  
701 Fourth Avenue South, Suite 400  
Minneapolis, Minnesota 55415-1843

Re: Draft Environmental Impact Statement – Bottineau Transitway, Hennepin County,  
Minnesota. CEQ # 20140108

Dear Ms. Simon and Mr. Rusco:

The U.S. Environmental Protection Agency (EPA) has reviewed the Federal Transit Administration's (FTA) March 2014, Draft Environmental Impact Statement (DEIS) for the Bottineau Transitway Project. Our comments are provided pursuant the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

FTA, the Hennepin County Regional Railroad Authority (HCRRA) and the Metropolitan Council propose to construct and operate a light rail transit (LRT) project to improve transit service in the Bottineau Transitway Corridor in Hennepin County, Minnesota. The proposed Bottineau Transitway Project is a 13-mile corridor of transportation improvements that extends from downtown Minneapolis to the northwest, serving north Minneapolis, Golden Valley, Robbinsdale, Crystal, New Hope, Osseo, Brooklyn Park, and Maple Grove. The purpose of the project is to provide transit service that will satisfy the long-term regional mobility and accessibility needs for businesses and the traveling public. A No-build Alternative, an Enhanced Bus/Transportation System Management Alternative and four light rail transit alignment alternatives are evaluated in the DEIS. The DEIS identifies LRT Alternative B-C-D1 as the Preferred Alternative.

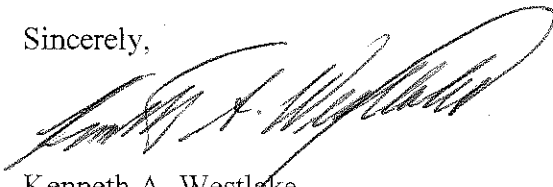
EPA rates the DEIS preferred alternative as "EC-2, Environmental Concerns-Insufficient Information." In order to fully assess environmental impacts, additional analysis regarding the vulnerability of water resources and biological resources should be undertaken. In order to fully protect the environment, additional avoidance, minimization and compensation mitigation measures should be identified in the Final EIS (FEIS). An explanation of our rating system can be found in the enclosure entitled, "Summary of Rating Definitions and Follow-Up Actions." Our detailed comments are enclosed.

In addition, EPA recommends the project proponents consider incorporating green building strategies into the Bottineau Transitway Project. By adopting green building strategies, the project proponents can maximize economic and environmental performance. Green building methods can be integrated into a project's facilities (e.g., transit stations, and operation and maintenance facilities) at any stage, from design and construction, to operation and maintenance.

EPA understands that the FTA environmental review will culminate in a combined FEIS/Record of Decision (ROD). We recommend FTA convene a participating resources agencies meeting to present and discuss FTA's proposed draft written responses to DEIS comments prior to FTA issuing an FEIS/ROD. This will allow the resources agencies an opportunity to react to the proposed responses to the agencies' DEIS comments and for revisions to be made (if appropriate) prior to release of the FEIS/ROD.

Virginia Laszewski, of my staff, is EPA's lead NEPA reviewer for this project. She may be reached by calling 312/886-7501 or by email at laszewski.virginia@epa.gov. EPA requests at least a two-week advance notice prior to our receipt of project materials for review and prior to project meeting/conference calls. We also request one hardcopy and 3 DVDs of the FEIS/ROD, when it is available.

Sincerely,



Kenneth A. Westlake  
Chief, NEPA Implementation Section  
Office of Enforcement and Compliance Assurance

Enclosures (2): 1) EPA Comments - FTA Bottineau Transitway DEIS, and 2) "Summary of Rating Definitions and Follow-Up Actions."

Cc: Arlene McCarthy, Director, Metropolitan Transportation Services, Metropolitan Council,  
390 Robert Street North, St. Paul, Minnesota 55101-1805  
Melissa Jenny, USACE-St Paul, 180 5th Street East, Suite 700, St Paul, MN 55101  
Andrew Horton, USFWS-Twin Cities Field Office, 4101 American Blvd East,  
Bloomington, MN 55425-1665  
Lois Kimmelman, FTA-Chicago, 200 West Adams St., Suite 320, Chicago, IL 60606  
Lisa Joyal, MnDNR, Box 25, 500 Lafayette Road, St. Paul, MN 55155  
Melissa Doperalski, MnDNR, 1200 Warner Road, St Paul, MN 55106

Kate Drewry, MnDNR, 1200 Warner Road, St. Paul, MN 55106

Kelly Gragg-Johnson, SHPO, Minnesota Historical Society, 345 Kellogg Blvd. W.,  
St. Paul, MN 55102-1903

Barbara Mitchell Howard, SHPO, Minnesota Historical Society, 345 Kellogg Blvd. W.,  
St. Paul, MN 55102-1903

**EPA Comments - Federal Transit Administration (FTA) Draft Environmental Impact  
Statement (DEIS) – Bottineau Transitway, Hennepin County, Minnesota  
(CEQ # 20140108)**

**ALTERNATIVES**

DEIS Alternatives: A No-build Alternative, an Enhanced Bus/Transportation System Management (TSM) Alternative and four light rail transit (LRT) alignment alternatives (Alternative A-C-D1, Alternative A-C-D2, Alternative B-C-D1, and Alternative B-C-D2 are evaluated in the DEIS. The DEIS identifies Alternative B-C-D1 as the Preferred Alternative.

DEIS Preferred Alternative (B-C-D1): Alternative B-C-D1 alignment begins in Brooklyn Park just north of TH 610 near the Target North Campus, follows West Broadway Avenue, and crosses Bottineau Boulevard at 73rd Avenue to enter the BNSF railroad corridor. Adjacent to the BNSF freight rail tracks, it continues in the railroad corridor through the cities of Crystal, Robbinsdale, and Golden Valley. At TH 55, the alignment turns to the east and follows TH 55 to Target Field Station in downtown Minneapolis.

Alternative B-C-D1 includes up to 10 new stations. The decision to use either the Golden Valley Road or Plymouth Avenue/Theodore Wirth Regional Park station option is yet to be determined. Three of the stations would include park-and-ride lots: 1) the 93rd Avenue station; 2) the existing 63rd Avenue park-and-ride facility; and 3) the Robbinsdale station. Two options for the location of an Operation and Maintenance Facility (OMF) are identified as: 1) the existing park-and-ride station at 93rd Avenue and 2) the northwest quadrant of the intersection of Winnetka Avenue [County State Aid Highway (CSAH) 103] and 101st Avenue. The location for the OMF is yet to be determined. Alternative B-C-D1 includes four new bridges and modifications to eight existing bridges and modifications to an undisclosed number of culverts.

- In Alignment D1, two station location options are identified, but only one will be built. Regarding the Golden Valley Road station – it is not clear who this station will be serving. A station at this location looks hard to access; there are adjacent wetlands and streams, no adjacent parking, and few nearby residential areas. Conversely, the Plymouth Avenue station appears to be closer to residential areas, potentially with fewer wetland impacts.

**Recommendation: EPA recommends the FEIS identify how station location decisions will be made. These decisions should be documented based on how alternatives fulfill project purpose and need and their relative impacts.**

- Two options for the location of the proposed Operation and Maintenance Facility (OMF) are identified as: Site 1) the existing park-and-ride station at CR 103 and 93rd Avenue; and Site 2) the northwest quadrant of the intersection of Winnetka Avenue [County State Aid Highway (CSAH) 103] and 101st Avenue. The DEIS indicates that the OMF at CR 103 and 93<sup>rd</sup> Avenue appears to have fewer potential wetland and habitat impacts.

**Recommendation:** We recommend the FEIS identify how the OMF location decision will be made. We recommend selection of the alternative at CR 103 and 93<sup>rd</sup> Avenue because of its apparent fewer impacts.

DEIS Identified “Environmentally Preferred Alternative:” The DEIS identifies Alternative B-C-D1 as both the Preferred Alternative and the Environmentally Preferred Alternative. Section ES-9 of the DEIS says; *“Alternative B-C-D1 meets the purpose and need of the Bottineau Transitway project and is the environmentally preferred alternative because it will cause the least damage to the biological and physical environment and it best protects, preserves, and enhances historic, cultural, and natural resources.”* However, of all the DEIS alternatives, Alternative B-C-D1 has the greatest amount of wetland, floodplain and wildlife habitat impacts, and potential impacts to Blanding’s turtles and their habitat. While Alternative B-C-D1 may best protect, preserve and enhance historic and cultural resources, it does not cause the least damage to the biological and natural resources of the physical environment.

**Recommendation:** We recommend the FEIS acknowledge that Alternative B-C-D1 does not cause the least damage to the biological and natural resources of the physical environment.

## **AIR QUALITY**

Intersection-level carbon monoxide (CO) modeling was performed for the worst operating intersection under worst-case conditions. The CO modeling results presented in the DEIS show that the Bottineau Transitway Project is not expected to cause CO concentrations exceeding state or federal standards. Based on the qualitative assessment presented the DEIS, the Project is not expected to cause exceedances of the other criteria pollutants.

Mobile Source Air Toxics (MSATs) / Air Toxics: A qualitative mobile source air toxics impacts analysis is presented in the DEIS. While operation of the transit project is anticipated to reduce emissions from private vehicles, the LRT system may add electric generation emissions for trains and diesel-related air toxics during project construction.

**Recommendation:** Because MSATs can cause adverse health impacts, especially to vulnerable populations such as children, the elderly, and those with existing respiratory health issues, EPA recommends the FEIS identify potential mitigation measures to decrease the exposure of these populations to MSATs emissions during construction and operation of the proposed project. Such measures may include, but should not be limited to, strategies to reduce diesel emissions, such as project construction contracts that require the use of equipment with clean diesel engines and the use of clean diesel fuels, and limits on the length of time equipment is allowed to idle when not in active use (EPA recommends idling not exceed 5 minutes).

Climate Change/Green House Gases GHG)/Increased Frequency and Intensity of Precipitation Events: Given the increased frequency and intensity of precipitation events associated with climate change, we recommend the FEIS identify and discuss how such precipitation events might impact the proposed Bottineau Transitway and its associated facilities during construction

and operation.

**Recommendation:** We recommend that the FEIS identify and discuss any anticipated effects of climate change on the project and possible adaptation measures. For example, discuss any effects that predicted increases in the number and/or intensity of precipitation events associated with climate change may have on sizing bridge spans, culvert openings, and stormwater management measures in order to accommodate such events and ensure project longevity, public health, and safety.

### **WATER RESOURCES – WETLANDS AND STREAMS**

The DEIS discloses that wetlands and several surface waterbodies (streams) are present within the project corridors under consideration. The DEIS discloses that of the four build alternatives, the Preferred Alternative (Alternative B-C-D1) is estimated to have the greatest amount of direct wetland impact (9.4 to 10.2 acres of wetland fill). In addition, EPA noted, at a minimum, the following stream crossings: one stream crossing in Alignment A; one stream crossing in Alignment B and the potential for headwater stream impact at a proposed Operations & Maintenance Facility<sup>1</sup>; and at least one stream crossing in Alignment D1.

EPA expects that a Section 404 permit under the Clean Water Act will be required for this project by the U.S. Army Corps of Engineers (USACE) for proposed discharges of dredged or fill materials to Waters of the United States. The 404 approval is contingent upon the project complying with the Section 404(b)(1) guidelines under the Clean Water Act. These guidelines are summarized as follows:

- Least Environmentally Damaging Practicable Alternative (LEDPA)<sup>2</sup> – There must be no practicable alternative to the proposed discharge (impacts) which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences;
- No Violation of Other Laws – The proposed project must not cause or contribute to violation of state water quality standards or toxic effluent standards, and must not jeopardize the continued existence of federally-listed endangered or threatened species or their critical habitat(s);
- No Significant Degradation – The project must not cause or contribute to significant degradation of Waters of the United States; and
- Minimization and Mitigation of Adverse Impacts – The project must include appropriate and practicable steps to avoid impacts to regulated Waters of the United States. Where impacts are unavoidable, there must be demonstration of how impacts have been minimized. Finally, compensatory mitigation must be provided to offset unavoidable, minimized impacts to the aquatic ecosystem.

EPA's review of aerial photography and area maps for the proposed Preferred Alternative's Alignment D1 corridor indicates that wetlands are present along both sides of the alignment

<sup>1</sup> The proposed OMF Facility/Park and Ride at the northeast corner of CR 103 and 93<sup>rd</sup> Ave.

<sup>2</sup> Furthermore, an alternative is considered practicable if "it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." [40 CFR Part 230.3]

along nearly the entire D1 corridor. Impacts to large, contiguous wetlands as well as open water wetlands (within South Halifax Park) that would be required to construct Alignment D1 appear to be sizeable. While wetlands are adjacent to an existing disturbed corridor associated with the Burlington Northern Santa Fe (BNSF) rail line, wetland impacts associated with this alignment will be larger than an alternative using the Alignment D2 corridor. The justification for choosing Alignment D1 instead of Alignment D2 as part of the Preferred Alternative is an important consideration for compliance with the 404(b)(1) guidelines and CWA/Section 404 permitting.

**Recommendations: EPA recommends the FEIS include:**

- A specific discussion of how sequencing established by the Clean Water Act Section 404(b)(1) guidelines has been applied. This sequence is: avoidance first, then demonstrated impact minimization, then mitigation for remaining unavoidable, minimized impacts;
- A 404(b)(1) analysis; and,
- A discussion on proposed mitigation for unavoidable, minimized wetland and stream impacts.

The DEIS does not include wetland delineations, or wetland and stream quality assessments. Without formal wetland delineations and quality assessments, the wetland and stream impacts information presented in the DEIS for each action alternative is insufficiently detailed.

**Recommendations:**

- The FEIS should include wetland delineations, USACE jurisdictional determinations, and wetland and stream quality assessments. This information should encompass all areas of right-of-way (ROW), adjacent construction access and access road locations, staging areas, station locations, and park-and-ride lots associated with the Preferred Alternative. This information will provide accurate baseline data on existing wetlands and water resources, and accurate quantification of potential impacts.
- To help inform decisions regarding the location of the OMF and choice between two station locations in Alignment D1, the FEIS should include potential aquatic resource impacts for all options, based on wetland delineations, and wetland and stream quality assessments.
- Potential permanent and temporary wetlands and stream impacts noted on FEIS impact summary tables and impact narratives in the FEIS should be based on the delineations and assessments. The FEIS should address and discuss construction staging and access, and identify how wetlands adjacent to construction areas will be protected from incidental

fill during construction. Restoration of all temporary wetland impacts should also be discussed.

- The FEIS should discuss stream impacts associated with each alignment, station locations and potential OMF locations. The FEIS should provide impact summary totals for the preferred alignments [i.e., linear footage of impact, stream impact location maps (including new or modified stream crossings or culvert work, with narrative discussion of impacts), and a description of stream impacts].
- The DEIS (Section 5.9 – Water Quality and Stormwater) identifies several streams that would be crossed and that are specifically listed as impaired (i.e., not meeting state water quality standards) on the Minnesota Pollution Control Agency's (MPCA) Clean Water Act Section 303(d) list of impaired waterbodies. Additionally, several receiving waterbodies located downstream of potentially impacted channels are also listed on the 303(d) list.

**Recommendation:** The FEIS should provide information on the location and number of proposed stream crossings or stream impacts (associated with culvert repair, extension, etc.), whether or not the waterbody is a 303(d)-listed waterbody or upstream of a 303(d)-listed waterbody, and describe how the project could potentially affect each listed waterbody with regard to specific listed impairments.

- The DEIS does not discuss the potential for indirect impacts to wetlands due to shading from construction of transit stations in or adjacent to existing wetlands or offer mitigation of indirect wetland impacts. The DEIS also did not include any discussion on the potential for temporary wetland impacts associated with construction access or staging. Appendix E Conceptual Drawings (e.g., Sheet #76 of 122) show what appear to be temporary access roads built in wetlands along portions of the proposed alignments. If these are in fact proposed temporary access roads or construction access, they were not labeled as such on the drawings.

**Recommendations:**

- EPA recommends that FTA coordinate with the USACE, U.S. Fish and Wildlife Service (USFWS), EPA and Minnesota Department of Natural Resources (MnDNR) to determine if wetland mitigation for indirect impacts is expected and required. If mitigation for indirect impacts, to include shading, is required, the FEIS should discuss this point.
- The FEIS should discuss acreages of impact from both direct and indirect impacts, as well as proposed mitigation ratios for both direct and indirect wetland impacts.
- The FEIS should discuss temporary wetland impacts, and how those wetland impacts will be restored. Monitoring of restored wetland areas



to ensure full restoration is expected. Conceptual monitoring plans should be included in the FEIS.

- To avoid confusion or misunderstanding of the information depicted on project figures, we also recommend that FEIS project figures/drawings include comprehensive legends.

### **THREATENED OR ENDANGERED SPECIES**

The USFWS has noted multiple species, including endangered and proposed-as-endangered species, as being located in Hennepin County. Additionally, many state-listed, threatened, endangered, and special concerns species are found in Hennepin County, including Blanding's turtles. Email correspondence from USFWS in Appendix D (Andrew Horton, dated February 18, 2012) does not specifically state that USFWS concurs that there will be no impacts to threatened or endangered species. Furthermore, USFWS correspondence does not discuss any potential impacts of the proposed project on the northern long-eared bat, which is proposed as endangered and will likely be listed as endangered in the near future. Last, USFWS correspondence recommended additional eagle nest surveys and further coordination with USFWS as the DEIS was being developed, but the DEIS did not include any additional correspondence from USFWS past 2012.

The only correspondence provided by the MnDNR is an email from Lisa Joyal dated November 2, 2012 2:07pm to Ashley Payne, Kimberly-Horn and Associates, Inc.: "I have reviewed your assessment of the potential for the above project to impact rare features, and concur with your assessment." This email does not identify exactly what assessment MnDNR is concurring with. Page 5-85 of the DEIS states, "*Blanding's turtles may be found in Bassett Creek and adjacent open water wetland areas in Theodore Wirth Regional Park. The project is anticipated to result in some wetland impacts, and therefore there would be some potential impact to turtle habitat anticipated for the Alignment D1 section of this alternative.*"

**Recommendation:** EPA recommends that FTA continue to coordinate with USFWS and the MnDNR to determine if any of the proposed activities would or could detrimentally affect any Federally- or state-listed species, species proposed for listing, or their critical habitat. The FEIS should include updated correspondence from USFWS and MnDNR confirming whether the proposed project will, or will not, affect any Federally- or state-listed threatened or endangered species, including the northern-long eared bat and the Blanding's turtle.

- Page 5-92 of the DEIS discusses standard guidelines for avoiding impacts to bald eagle nesting sites and future eagle nest surveys to be conducted during final design.

**Recommendation:** These guidelines and surveys are commitments that should be reiterated and formalized in the FEIS/ROD.

- Page 5-92 of the DEIS states that during the early stages of final design, bridge structures and forested areas within the construction limits would be field-checked in compliance with the

Migratory Bird Treaty Act to determine whether swallows' or other species' nests are present. If active nests are documented, appropriate mitigation measures would be implemented during construction, such as seasonal work windows or nest and tree removal during the non-nesting season. The measures selected for construction mitigation would be made in consultation with the appropriate agencies.

**Recommendation: The FEIS should specify the agencies with which consultation will be undertaken, and specify the timeframes during which mitigation measures would be implemented. These surveys and mitigation measures should be commitments in the FEIS/ROD.**

- The Fish and Wildlife Coordination Act (FWCA) requires that Federal agencies consult with the state wildlife agencies and USFWS concerning the conservation of wildlife resources where the water of any stream or other water body is proposed to be controlled or modified by a Federal agency or any public or private agency operating under a Federal permit. As this project proposes impacts to several Waters of the United States, consultation with these agencies is warranted.

**Recommendation: EPA recommends that FTA continue coordination efforts with USFWS and state wildlife agencies as appropriate to meet the conditions of the Fish and Wildlife Coordination Act. Correspondence to and received from coordinating agencies documenting FWCA coordination should be included in the FEIS/ROD.**

## **FLOODPLAINS**

Figure 5.2-6 of the DEIS show several identified potential floodplain mitigation sites; however, these sites may already be existing wetland or surrounded by existing wetland, and nearly all appeared to be covered with a mature forest canopy. EPA does not support the use of forested areas for floodplain mitigation, as mitigation would require site excavation and forest impacts.

**Recommendation: We recommend the FEIS provide information on potential floodplain impacts (acres of impact plus acre-feet of impact), and potential floodplain mitigation information (including expected mitigation ratios, updates on status of coordination with permitting entities, and identification of potential mitigation sites that are not currently forested).**

## **STORMWATER**

The "Stormwater Technical Report" and DEIS briefly discuss long- and short-term mitigation measures, such as implementation of permanent best management practices (BMPs), to include detention and infiltration facilities to control and treat stormwater runoff caused by an increase in impervious surfaces as a result of project implementation. However, the DEIS does not discuss any sustainable BMPs to control stormwater, including the use of pervious pavement at park and ride areas. The DEIS also does not confirm that stormwater detention basins will be built to avoid any wetland areas.

**Recommendations:** All stormwater BMPs and detention areas should be built and located outside of natural wetlands and streams. Existing natural wetlands should not be used as primary detention facilities, and any treated stormwater discharged to natural wetlands should not cause a change of existing wetland type and function (i.e., should not change an emergent wetland to an open water wetland, etc.). Sustainable stormwater technologies, including the use of pervious or porous pavement, should be utilized throughout the project.

### **FORESTED IMPACTS**

Trees provide valuable habitat and protect water quality, in part, by stabilizing soils in a watershed. The DEIS does not quantify or discuss impacts to mature trees (in non-wetland areas) associated with the project.

**Recommendations:** We recommend the FEIS quantify acreage and number of upland trees to be removed by the project. EPA recommends further coordination with USFWS, MnDNR, and local municipalities regarding providing voluntary upland forested mitigation for these losses. The FEIS should include specific information on what forest mitigation is being offered (e.g., a summary of mitigation ratios, a summary of how mitigation will be offered). If applicable, the FEIS should clarify forest mitigation provided for bat habitat impacts versus forest mitigation provided for impacts to upland forest.

### **ADDITIONAL COMMENTS**

**Noxious Weeds/Invasive Species:** The DEIS identifies that noxious weeds/invasive species may be within or near the DEIS-identified Preferred Alternative ROW. Early recognition and control of new infestations is essential to stopping the spread of infestation and avoiding future widespread use of herbicides, which could correspondingly have more adverse impacts on biodiversity and nearby water quality.

**Recommendations:** We recommend the FEIS include a vegetative management plan that addresses the identification and control of noxious weed/invasive species in and near the project ROW and associated facilities during project construction and operation. The plan should list the noxious weeds and exotic plants that occur in the resource area. In cases where noxious weeds are a threat, EPA recommends the document detail a strategy for prevention, early detection of invasion, and control procedures for each species.

**Sustainability and Greening:** By adopting green building strategies, such as energy-efficient lighting, the project proponents can maximize economic and environmental performance (e.g., protection and/or enhancement of surface water and groundwater quality). Green building methods can be integrated into transit stations, park-and-ride lots, and OMF at any stage, from design and construction, to operation and maintenance. For additional information on green building, we recommend you visit our website at [www.epa.gov/greenbuilding/](http://www.epa.gov/greenbuilding/).

**Recommendation:** EPA recommends project proponents consider using green building strategies for the Bottineau Transitway project.

### **DEIS CORRECTIONS/ADDITIONS**

Glossary of Terms (pp. xv to xx): The DEIS uses the following terms and associated acronyms: Locally Preferred Alternative (LPA), Preferred Alternative, Environmentally Preferred Alternative, Least Environmentally Damaging Preferred Alternative (LEDPA), Least Environmentally Damaging Practicable Alternative (LEDPA). However, these terms are not defined in the DEIS Glossary of Terms.

**Recommendation:** In order to help avoid reader confusion, EPA recommends each of the above referenced terms be defined in the FEIS Glossary of Terms and their associated acronyms included in the Acronyms section of the FEIS.

Acronyms (pages xxi to xxii): The LEDPA acronym (page xxii) is typically associated with U.S. Army Corps of Engineers' Clean Water Act/ Section 404 permitting process where it is understood that LEDPA stands for the "least environmentally damaging practicable alternative." However, on page xxi of the DEIS the LEDPA acronym is identified as "the least environmentally damaging preferred alternative."

**Recommendation:** EPA recommends the Acronym section of the FEIS identify the LEDPA acronym to mean "the least environmentally damaging practicable alternative."

## **SUMMARY OF RATING DEFINITIONS AND FOLLOWUP ACTIONS\***

### **ENVIRONMENTAL IMPACT OF THE ACTION**

#### **LO—Lack of Objections**

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### **EC—Environmental Concerns**

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

#### **EO—Environmental Objections**

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### **EU—Environmentally Unsatisfactory**

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

### **ADEQUACY OF THE IMPACT STATEMENT**

#### **Category 1—Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### **Category 2—Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

#### **Category 3—Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*\*From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment.*